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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,999	03/20/2007	William Warrillow	4147-167	9272

23117 7590 04/24/2009
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EXAMINER

AMBAYE, MEWALE A

ART UNIT	PAPER NUMBER
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4124

MAIL DATE	DELIVERY MODE
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04/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/581,999	Applicant(s) WARRILLOW ET AL.	
	Examiner MEWALE AMBAYE	Art Unit 4124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 20 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/07/06, 08/13/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 22-43 are pending.

Oath/Declaration

2. The Oath/Declaration filed on 03/20/2007 is accepted by the examiner.

Information Disclosure Statement

4. The information disclosure statement filed on 06/07/06 & 08/13/07 is in compliance with 37 CFR 1.97.

Drawings

5. The drawings filed on 06/07/07 are accepted by the examiner.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims **21-43** are rejected under 35 U.S.C. 102(b) as being anticipated by Cecile et al (hereafter referred as Cecile) European Patent Application EP 1220557A1.

8. **As per claim 22, 40 & 41:** Cecile discloses a method/device/system for managing resources in a communication system having resources shared by at least two operators, comprising the steps of: receiving an access request for a first operator of the at least two operators (*See FIG. 6, at least two operators, Col 10; lines 33-38*); executing a first

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determination whether there are sufficient amount of free resources available in the communication system (*See Col 10; lines 30-49, FIG. 8; Step 818*); executing a second determination whether a total amount of said resources shared by at least two operators in use in the communication system exceeds a first threshold (*See Col 10 through Col 11; line 58-9, FIG. 8; Step 842*); executing a third determination whether a total amount of said resources shared by at least two operators in use for the first operator exceeds a second threshold (*See Col 11; lines 10-13, FIG. 8; Step 844*); and deciding on accepting the access request based on the results of the first, second and third determinations (*See Col 11; lines 13-19, FIG. 8; Step 846*).

9. **As per claim 23:** Cecile discloses a method wherein the step of executing the second determination is performed only if the first determination shows that there are sufficient free resources available in the communication system (*See Col 10; Para. 0072*).

10. **As per claim 24:** Cecile discloses a method wherein the access request is accepted if the second determination shows that the total amount of resources in use in the communication system does not exceed the first threshold (*See Col 11; lines 5-13*).

11. **As per claim 25:** Cecile discloses a method further comprising the step of size discrimination based on the capacity requested by the incoming connection dependent on the total amount of resources in use in the communication system if the second determination shows that the total amount of resources in use in the communication system does not exceed the first threshold (*See Col 11; lines 28-42*).

12. **As per claim 26:** Cecile discloses a method wherein the size discrimination comprises the steps of: determination of a threshold class dependent on the total amount of resources in use in the communication system (*See FIG. 6; Step 814*); comparing an amount of resources

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required by the access request with a maximum accepted size associated with the determined threshold class (*See Col 10; lines 46-57*); accepting the access request if the amount of resources required by the access request is smaller than or equal to the maximum accepted size; and rejecting the access request if the amount of resources required by the access request is larger than the maximum accepted size (*See Col 10; lines 52-57*).

13. **As per claim 27:** Cecile discloses a method wherein the step of executing the third determination is performed only if the second determination shows that the total amount of resources in use in the communication system exceeds the first threshold (*See Col 11; lines 5-13*).

14. **As per claim 28:** Cecile discloses a method wherein the access request is accepted if the third determination shows that the total amount of resources in use for the first operator does not exceed the second threshold (*See Col 11; Para. 0075*).

15. **As per claim 29:** Cecile discloses a method wherein the first threshold is equal to a pre-determined congestion threshold (*See FIG. 8; Step 814*).

16. **As per claim 30:** Cecile discloses a method wherein the first threshold is equal to a pre-determined congestion threshold minus the amount of resources required by the access request (*See FIG. 8: Steps 818, 842 & 844*).

17. **As per claim 31:** Cecile discloses a method wherein the second threshold is equal to a pre-determined portion of the total resources allocated to the first operator (*See FIG. 8; Steps 842 & 822*).

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18. **As per claim 32:** Cecile discloses a method wherein the second threshold is equal to a pre-determined portion of the total resources allocated to the first operator minus the amount of resources required by the access request (*See FIG. 8: Steps 818, 842 & 844*).

19. **As per claim 33:** Cecile discloses a method further comprising the step of storing a respective measure of the fraction of resources currently in use by each of said at least two operators, said measure for the first operator being updated upon accepting the access request or when an already established connection for the first operator is terminated (*See Col 9; Para. 0066*).

20. **As per claim 34:** Cecile discloses a method further comprising the step of updating the respective measures by means of resource utilisation information from an external source (*See Col 10; Para. 0068*).

21. **As per claim 35:** Cecile discloses a method wherein the access request is rejected if the first determination shows that there are not sufficient free resources available in the communication system or if the third determination shows that the total amount of resources in use for the first operator exceeds the second threshold (*See Col 11; 0075*).

22. **As per claim 36:** Cecile discloses a method wherein a step of evaluating a priority of the access request if the first determination shows that there are not sufficient free resources available in the communication system or if the third determination shows that the total amount of resources in use for the first operator exceeds the second threshold (*See Col 11; Para. 0080*).

23. **As per claim 37:** Cecile discloses a method wherein the step of evaluating the priority comprises the steps of: executing a fourth determination whether the sum of the free resources available in the communication system and a total amount of resources being occupied by traffic

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having a lower priority than the priority of the access request for the first operator is smaller than the amount of resources required for the access request for the first operator (*See Col 11; Para. 0078 & 0079*); rejecting the access request if the fourth determination shows that the sum of the free resources available in the communication system and the total amount of resources being occupied by traffic having a lower priority than the priority of the access request for the first operator is smaller than the amount of resources required for the access request for the first operator (*See Col 11; Para. 0079*); and pre-empting on-going traffic sufficient to allow the access request for the first operator if the fourth determination shows that the sum of the free resources available in the communication system and the total amount of resources being occupied by traffic having a lower priority than the priority of the access request for the first operator is equal to or larger than the amount of resources required for the access request for the first operator, and accepting the access request (*See Col 11; Para. 0080*).

24. **As per claim 38:** Cecile discloses a method wherein the step of pre-empting in turn comprises the steps of: determining which operator of the at least two operators presently being in most excess of its target resource utilisation (*See Col 10; lines 5-20*); selecting a connection of the operator of the at least two operators presently being in most excess of its target resource utilisation having a lower priority than the priority of the access request for the first operator (*See Col 10; Para. 0069*); releasing the selected connection (*See Col 10; Para. 0070*); determining whether the resources required for the access request is larger than the free resources available in the communication system; and repeating the previous steps if the resources required for the access request is larger than the free resources available in the communication system (*See Col 10; lines 22-29*).

25. **As per claim 39:** Cecile discloses a method wherein the step of receiving an access request for the first operator in turn comprises the steps of: receiving a renegotiation request for an ongoing call from the first operator (*See Col 9; Para. 0065*); providing a supplementary access request for the first operator having an access request size corresponding to the difference between a requested size and a present size of the ongoing call, if the requested size is larger than the present size (*See Col 9; 0066*); and performing a change of resource utilisation for the ongoing call, if the present size is larger than the requested size (*See Col 10; Para. 0069*).
26. **As per claim 42:** Cecile discloses a method wherein the arrangement is a shared universal mobile telecommunication system terrestrial radio access network and the device is comprised in a radio network controller (*See FIG. 6*).
27. **As per claim 43:** Cecile discloses a method wherein the arrangement is the communication system (*See "Title"*).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mewale Ambaye whose telephone number is (571) 270-7634. The examiner can normally be reached on M - F, 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reach on (571) 272-7527. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from their Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)?

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (In USA or Canada) or 571-272-1000.

/M. A./

Examiner, Art Unit 4124

/Lewis G. West/

Supervisory Patent Examiner, Art Unit 4124